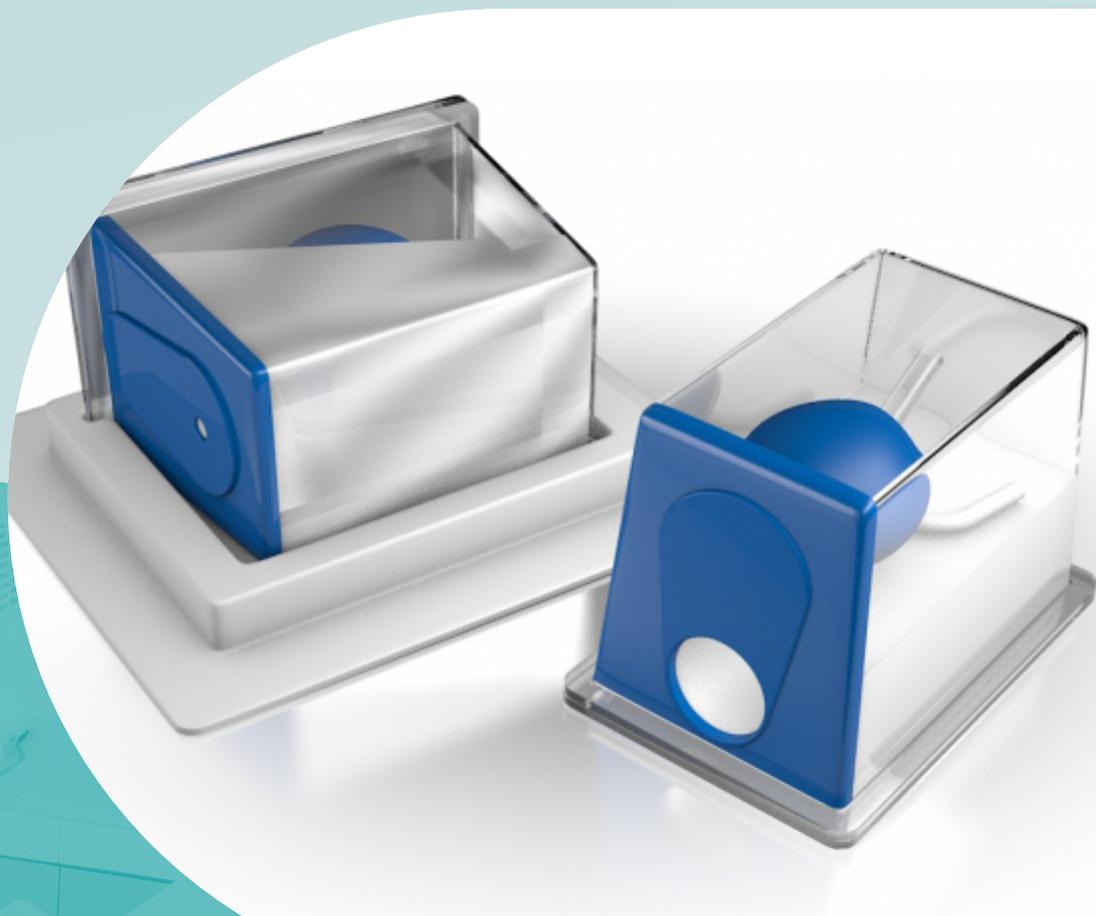


# FANTÔMES D'ENTRAÎNEMENT



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## Partner Bertin Technologies



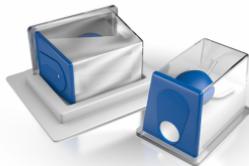
Bertin Technologies est un fournisseur mondial de solutions avancées de détection des rayonnements et de surveillance de l'environnement, spécialisé dans les moniteurs portatifs, les dosimètres électroniques personnels, les systèmes de surveillance de l'environnement et les technologies de gestion des déchets et du recyclage. Ses instruments sont conçus pour répondre aux exigences rigoureuses des installations nucléaires, des équipes d'intervention d'urgence et des agences environnementales.

### Product offering

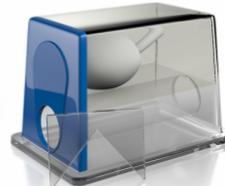
**Model 057A Triple Modality 3D Abdominal Phantom - CIRS**



**Model 053S, 053L and 053L-EF Ultrasound Prostate Training Phantom - CIRS**



**Model 053-I Ultrasound Prostate Training Phantom - CIRS**



**Model 600 3D Sectional Torso Phantom - CIRS**





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## Model 057A Triple Modality 3D Abdominal Phantom - CIRS

The CIRS Triple Modality 3D Abdominal Phantom is constructed of a self-healing formulation of Zerdine®(1) that allows multiple biopsy insertions with minimal needle tracking, and is ideal for demonstrating image-guided navigation technologies.



Abdominal imaging is useful for diagnosing disease and monitoring treatments. The Model 057A is representative of a small adult abdomen and can be imaged under CT, MR and ultrasound. This feature makes the phantom a useful tool for applications such as image fusion studies; imaging protocol developments; scan technique training; and system testing, validation and demonstration.

The Model 057A simulates the abdomen from approximately the thorax vertebrae (T9/T10) to the lumbar vertebrae (L2/L3) using simplified anthropomorphic geometry. The materials provide contrast between the structures under CT, MR and ultrasound. The solid polymer background gel will not leak when punctured.\*

Internal structures include the liver, the portal vein, two partial kidneys, a partial lung, the abdominal aorta, the vena cava, a simulated spine and six ribs. The liver has six lesions and the kidneys each have one lesion. A muscle layer and outside fat layer surround these structures and plastic end caps make the phantom durable enough for extended scanning. Blood vessels have CT contrast added to provide enhanced auto registration in image fusion applications

The Phantom includes a foam lined hard carry case. To accommodate image fusion techniques, CIRS can offer value-added options and services such as phantom specific CMM, reference CT or MRI data sets, attachment of customer specific registration devices and inclusion of special point markers.

### Features

- Demonstrate CT, ultrasound and MRI scan techniques
- Assess image fusion algorithms
- Test new equipment
- Validate automated biopsy systems
- Optimize imaging protocols
- Improve performance of freehand abdominal biopsies

Contact our product specialist or download the datasheet.

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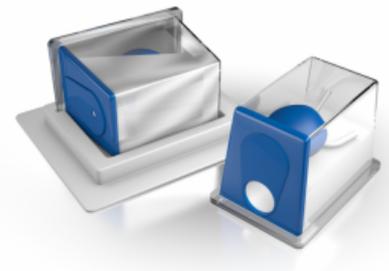
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## **Model 053S, 053L and 053L-EF Ultrasound Prostate Training Phantom - CIRS**

CIRS designed the Ultrasound Prostate Training Phantom as a multi-modality disposable phantom developed for practicing procedures that involve scanning the prostate with a rectal probe. There are three different models: Model 053S, 053L and 053L-EF.

The clear, acrylic container contains the prostate along with structures simulating the rectal wall, seminal vesicles and urethra. A 3 mm simulated perineal membrane enables various probes and surgical tools to be inserted into the prostate.

This phantom is an ideal training device for ultrasound guided cryosurgery, radioactive seed implantation, and needle biopsy.



### **OPTIONS**

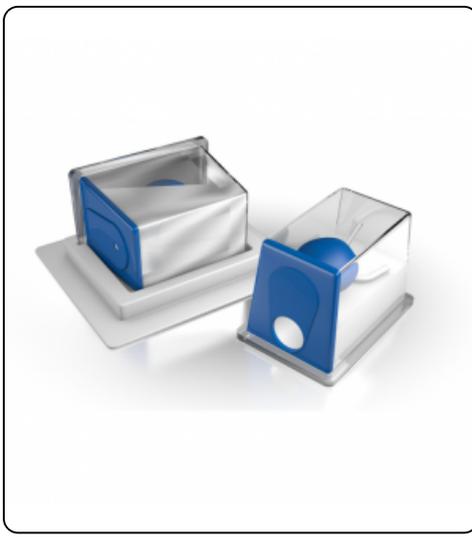
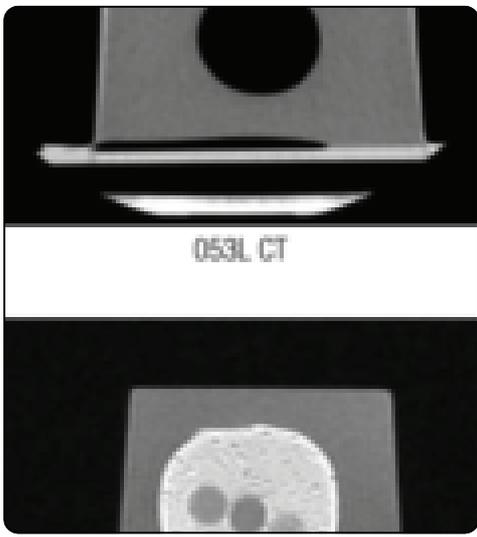
The phantom is available in three ways. The phantom is available with lesions (053L), without lesions (053S) and you can order either the standard side-fire configuration or an alternate geometry optimised for end-fire probes (053L-EF).

### **MODEL 053S 053L & 053L-EF FEATURES**

- Includes rectal wall, seminal vesicles, perineal membrane and urethra
- Train for ultrasound-guided cryosurgery, seed implantation and needle biopsy with one phantom
- Compatible with multiple probes and surgical tools
- Structures are visible under CT, MRI, ultrasound and elastography
- Gel designed to minimise needle tracking

For more information, go to [this page](#) from our partner.





**If you have any questions...**

**Contact PEO**

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## Model 053-I Ultrasound Prostate Training Phantom - CIRS

The CIRS Ultrasound Prostate Training Phantom (model 053-I) is a disposable phantom perfect for practicing permanent seed implantation procedures. It contains several unique features to assist the teaching and learning process.

The simulated perineal membrane permits needle insertion with realistic resistance. In addition, the area below the rectal wall is a clear gel to permit visualisation of probe orientation.



### PROSTATE TRAINING PHANTOM FEATURES

- Perineal membrane for needle insertion with realistic resistance
- Assess image fusion algorithms
- Test new equipment
- Optimize imaging protocols
- Improve performance of freehand abdominal biopsies

For more information about prostate phantoms, visit [our partner's website!](#)

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Radiothérapie > Fantômes d'AQ

## Model 600 3D Sectional Torso Phantom - CIRS

The Model 600 3D Sectional Torso Phantom has been designed for providing an accurate simulation of an average torso (22 cm posterior-anterior thickness) for medical imaging and dosimetry applications.



### Model 600 3D Sectional Torso Phantom features:

- can be configured to accommodate a multitude of dose measurement media
- usable on any X-ray imaging or treatment device
- includes internal organ structures
- ideal for calibration, QA and training purposes when specific internal organs are of interest

Read more about the Model 600 3D Sectional Torso Phantom on the [CIRS website](#)

[Model 600 3D Sectional Torso Phantom CIRS](#)



## Partner **Sun Nuclear Corporation**



Sun Nuclear est l'un des principaux fournisseurs de solutions complètes de gestion de la qualité pour la radiothérapie et l'imagerie diagnostique. Son portefeuille comprend des systèmes de positionnement, des outils de dosimétrie, des fantômes d'assurance qualité, des détecteurs, des dispositifs de surveillance du débit de dose, des logiciels d'analyse et des fantômes de formation. Ces solutions sont conçues pour aider les professionnels de la santé à assurer des soins précis, sûrs et efficaces aux patients.

### Product offering

**Fantôme de biopsie abdominale guidée par l'image (modèle 071B) - CIRS**



**Model 1425 - Doppler Flow System - Sun Nuclear**



**Model 1430 - Mini-Doppler Flow System - Sun Nuclear**



**Model 164A - Stereotactic Breast Biopsy Phantom - Sun Nuclear**



**Model 711-HN ATOM Max Dental & Diagnostic Head Phantom - CIRS**





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## Fantôme de biopsie abdominale guidée par l'image (modèle 071B) - CIRS

Le fantôme de biopsie abdominale guidé par l'image est un fantôme abdominal simplifié. Il convient à la formation et à la démonstration d'outils ou de procédures de navigation pour biopsie à l'aiguille guidée par l'image qui nécessitent une référence visuelle constante pour le placement de l'aiguille. Le fantôme permet de nombreuses utilisations dans le temps car le gel de fond minimise les traces d'aiguilles en cas de perforation.

Le fantôme contient 12 lésions de 5 à 12 mm de diamètre, positionnées en groupes de trois à des endroits cohérents dans le fantôme. Il comprend également une colonne vertébrale et des côtes simulées, ainsi qu'un marqueur « H » dans la colonne vertébrale pour aider à déterminer le côté de la tête dans une image CT. Vous pouvez voir les lésions et la colonne vertébrale sous échographie, tomodensitométrie et IRM. Le fond de gel polymère solide est anéchoïque et ne fuira pas non plus lorsqu'il est percé.

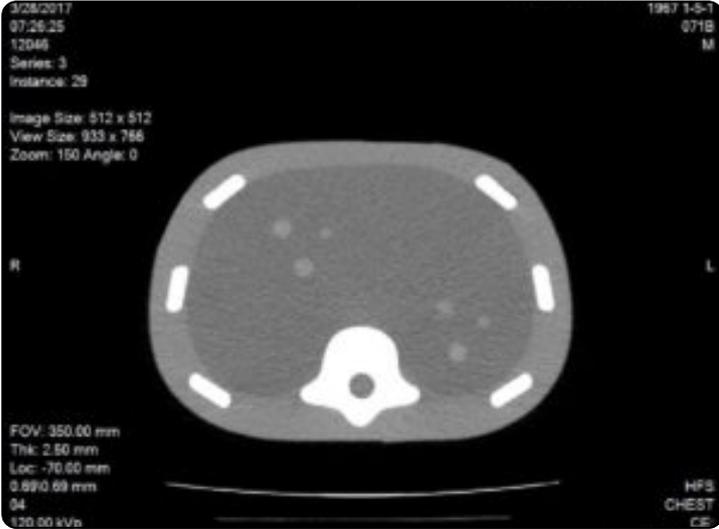
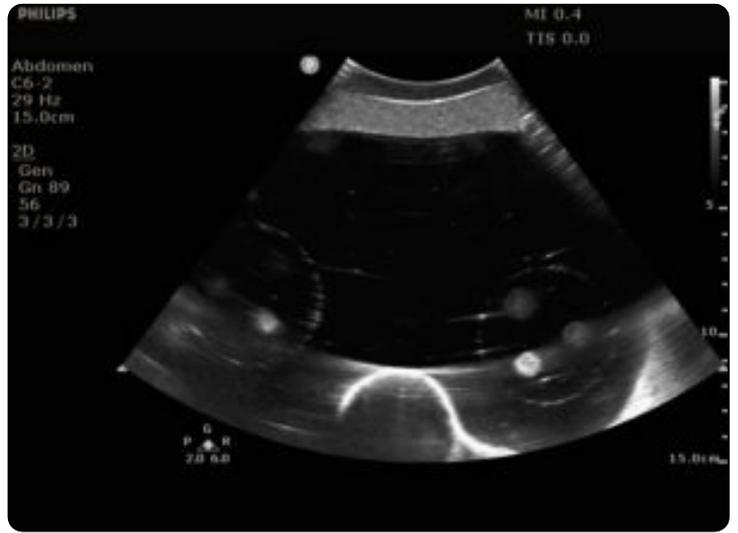
Le fantôme comprend également un étui de transport rigide doublé de mousse et il est utile dans plusieurs domaines. Le fantôme est parfait pour la tomodensitométrie, l'échographie et l'IRM, la numérisation en direct et la formation à la biopsie.

### CARACTÉRISTIQUES DU FANTÔME DE BIOPSIE ABDOMINALE GUIDÉE PAR IMAGE

- Améliorer les performances des biopsies abdominales à main levée
- Suivi minimal de l'aiguille - La couche de graisse Z-skin et le gel plus doux offrent de meilleures propriétés d'auto-guérison
- Valider les systèmes de biopsie automatisés
- Convient pour la tomodensitométrie, l'IRM et l'échographie

[Si vous souhaitez en savoir plus sur ce fantôme, jetez un œil au site de notre partenaire !](#)





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## Model 1425 - Doppler Flow System - Sun Nuclear

The Doppler Flow System from Sun Nuclear (formerly Gammex) tests both Doppler and B-mode ultrasound systems in a single unit. The compact, easy to store and transport designed system combines the flow system, phantom and electronic flow controller into a single unit. Scanner selection, quality control testing, training and research can all be performed using this multi-faceted ultrasound tool. A wide range of targets and vessels are included in the unit.

### Doppler Flow System features:

- the Choice of attenuations of 0.5 or 0.7 dB/cm/MHz
- combines low echo matrix with line reflectors and anechoic cyst targets at 2, 4 and 6 mm depths
- two 5mm vessels in the system adhere to FDA Doppler sensitivity recommendations.
- flow controller with a range of 1 to 12.5 ml/sec
- 5 preset pulse flow patterns

Do you want to know more about the Doppler Flow System?

If you want to continue your search for additional information on this product try this [link](#).



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## Model 1430 - Mini-Doppler Flow System - Sun Nuclear

The Doppler Flow System tests both Doppler and B-mode ultrasound systems in a single unit. The compact, easy to store and transport designed system combines the flow system, phantom and electronic flow controller into a single unit. Scanner selection, quality control testing, training and research can all be performed using this multi-faceted ultrasound tool. A wide range of targets and vessels are included in the unit.



### Mini-Doppler Flow System features:

- the Choice of attenuations of 0.5 or 0.7 dB/cm/MHz
- includes 404GS LE components with Grey Scale targets
- combines low echo matrix with line reflectors and anechoic cyst targets at 2, 4 and 6 mm depths
- two 4 mm vessels in the system adhere to FDA Doppler sensitivity recommendations.
- flow controller with a range of 0 to 10 ml/sec
- 8 preset pulse rates

Do you want to know more about the Mini-Doppler Flow System?

If you want to continue your search for additional information on this product try this [link](#).

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## Model 164A - Stereotactic Breast Biopsy Phantom - Sun Nuclear

The Stereotactic Breast Biopsy Phantom from Sun Nuclear (formerly Gammex) is designed to be used as a training phantom for performing biopsy procedures. It provides a good representation of breast tissue.

Multiple radiopaque lesions are impeded in the phantom to permit multiple uses of the phantom by different personnel.



### Model 164A Stereotactic Breast Biopsy Phantom features:

- made of clear gel encased in a soft vinyl for easy compression and a skin-like resistance to needle insertion
- embedded in the gel are radiopaque lesions ranging in size for practicing core biopsies
- liquid dye filled lesions allow for the practice of fine needle aspiration
- compressible within a biopsy instrument

If you want to continue your search for additional information on this product try this [link](#).



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## Model 711-HN ATOM Max Dental & Diagnostic Head Phantom - CIRS

The Model 711-HN ATOM Max Dental & Diagnostic Head Phantom is a standard of reference for diagnostic radiology of the head. The phantom has been developed to assist clinical and technical staff in the monitoring, selection, verification and training of scanning parameters common to most radiological procedures requiring fine anatomical details.

### Model 711-HN ATOM Max Dental & Diagnostic Head Phantom features:

- tissue Equivalent from 50 keV to 25 MeV
- carrying case included
- includes detailed anatomical features
- Frankfurt plane identified to ensure proper alignment
- positioning stand with six degrees-of-freedom
- easy to set up and use

Read more about the Model 711-HN ATOM Max Dental & Diagnostic Head Phantom on the [CIRS website](#)

